



*JFW*

PATENT

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

December 15, 2004

Date

*JFW*  
Jennifer J. Fortuny

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Donald B. Borders  
Application No. : 10/810,741  
Filed : March 26, 2004  
For : EXTRACTIVE PURIFICATION OF LIPOPEPTIDE  
ANTIBIOTICS

Art Unit : 1654  
Docket No. : 660081.425C1  
Date : December 15, 2004

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents:

In accordance with 37 CFR §§ 1.56 and 1.97 through 1.98, applicants wish to make known to the U.S. Patent and Trademark Office the references set forth on the attached Form PTO-1449. This application is a continuation of and relies, under 35 U.S.C. § 120, on the earlier filing date of prior Application No. 09/948,374, filed September 6, 2001, now issued as U.S. Patent No. 6,716,962; which is a continuation-in-part of U.S. Application No. 09/760,328, filed January 12, 2001, now issued as U.S. Patent No. 6,511,962. The references listed on the attached Form PTO-1449 were submitted to and/or cited by the U.S. Patent and Trademark Office in these prior applications and, therefore, are not required to be provided in this application. If the Examiner wishes, copies will be provided upon request. As to any reference supplied, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to traverse or antedate any such reference by a showing under 37

CFR § 1.131 or other method. Although the aforesaid references are made known to the U.S. Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of that is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Applicants believe this Information Disclosure Statement has been timely filed; however, the Director is authorized to charge any fee due by way of this Information Disclosure Statement to our Deposit Account No. 19-1090.

Respectfully submitted,  
Seed Intellectual Property Law Group PLLC



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Mae Joanne Rosok  
Registration No. 48,903

Enclosures:  
Postcard  
Form PTO-1449

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(MJR:jjf) 541157\_1.DOC

|                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |                                                            |                  |                                        |          |                               |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------|----------------------------------------|----------|-------------------------------|--|
| FORM PTO-1449<br>(REV. 7-80)                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                         | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE |                  | ATTY. DOCKET NO.<br>660081.425C1       |          | APPLICATION NO.<br>10/810,741 |  |
| INFORMATION DISCLOSURE STATEMENT<br>(Use several sheets if necessary)                                                                                                                                                                         |                                                                                                                                                                                                                                                                                         |                                                            |                  | APPLICANTS<br>Donald B. Borders et al. |          | FILING DATE<br>March 26, 2004 |  |
|                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |                                                            |                  | GROUP ART UNIT<br>1654                 |          |                               |  |
| <b>U.S. PATENT DOCUMENTS</b>                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                         |                                                            |                  |                                        |          |                               |  |
| *EXAMINER<br>INITIAL                                                                                                                                                                                                                          | DOCUMENT NUMBER                                                                                                                                                                                                                                                                         | DATE                                                       | NAME             | CLASS                                  | SUBCLASS | FILING DATE<br>IF APPROPRIATE |  |
| AA                                                                                                                                                                                                                                            | 3,126,317                                                                                                                                                                                                                                                                               | 03/24/64                                                   | Heinemann et al. | 424                                    | 118      |                               |  |
| AB                                                                                                                                                                                                                                            | 3,639,582                                                                                                                                                                                                                                                                               | 02/01/72                                                   | Umezawa et al.   | 424                                    | 118      |                               |  |
| AC                                                                                                                                                                                                                                            | 4,331,594                                                                                                                                                                                                                                                                               | 05/25/82                                                   | Hamill et al.    | 260                                    | 112.5R   |                               |  |
| AD                                                                                                                                                                                                                                            | 4,800,157                                                                                                                                                                                                                                                                               | 01/24/89                                                   | Eaton et al.     | 435                                    | 71       |                               |  |
| AE                                                                                                                                                                                                                                            | 5,039,789                                                                                                                                                                                                                                                                               | 08/13/91                                                   | Fukuda et al.    | 530                                    | 317      |                               |  |
| AF                                                                                                                                                                                                                                            | 5,912,226                                                                                                                                                                                                                                                                               | 06/15/99                                                   | Baker et al.     | 514                                    | 9        |                               |  |
| AG                                                                                                                                                                                                                                            | 6,511,962 B1                                                                                                                                                                                                                                                                            | 01/28/03                                                   | Borders et al.   | 514                                    | 11       |                               |  |
| AH                                                                                                                                                                                                                                            | 2002/0028771 A1                                                                                                                                                                                                                                                                         | 03/07/02                                                   | Curran et al.    | 514                                    | 9        |                               |  |
| AI                                                                                                                                                                                                                                            | 2002/0035063 A1                                                                                                                                                                                                                                                                         | 03/21/02                                                   | Borders et al.   | 514                                    | 9        |                               |  |
| <b>FOREIGN PATENT DOCUMENTS</b>                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |                                                            |                  |                                        |          |                               |  |
|                                                                                                                                                                                                                                               | DOCUMENT<br>NUMBER                                                                                                                                                                                                                                                                      | DATE                                                       | COUNTRY          | TRANSLATION                            |          |                               |  |
|                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |                                                            |                  | YES NO                                 |          |                               |  |
| AJ                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                         |                                                            |                  |                                        |          |                               |  |
| <b>OTHER PRIOR ART</b> (Including Author, Title, Date, Pertinent Pages, Etc.)                                                                                                                                                                 |                                                                                                                                                                                                                                                                                         |                                                            |                  |                                        |          |                               |  |
| AK                                                                                                                                                                                                                                            | Bodanszky, M. et al., "Structure of the Peptide Antibiotic Amphomycin," <i>Journal of the American Chemical Society</i> , April 4, 1973, 95(7):2352-2357.                                                                                                                               |                                                            |                  |                                        |          |                               |  |
| AL                                                                                                                                                                                                                                            | Debono, M. et al., "Enzymatic and Chemical Modifications of Lipopeptide Antibiotic A21978C: The Synthesis and Evaluation of Daptomycin (LY146032)," <i>The Journal of Antibiotics</i> , August 1988, XLI(8):1093-1105.                                                                  |                                                            |                  |                                        |          |                               |  |
| AM                                                                                                                                                                                                                                            | Martin, J.H. et al., "Isolation and Identification of D- $\alpha$ -Pipicollic Acid, $\alpha$ [L], $\beta$ -Methylaspartic Acid and $\alpha$ , $\beta$ -Diaminobutyric Acid From the Polypeptide Antibiotic Aspartocin," <i>Communications to the Editor</i> , April 20, 1960, pp. 2079. |                                                            |                  |                                        |          |                               |  |
| AN                                                                                                                                                                                                                                            | Naganawa, H. et al., "A Novel Fatty Acid From Laspartomycin," <i>The Journal of Antibiotics</i> , August 1970, XXIII(8):423-424.                                                                                                                                                        |                                                            |                  |                                        |          |                               |  |
| AO                                                                                                                                                                                                                                            | Naganawa, H. et al., "Laspartomycin, A New Anti-Staphylococcal Peptide," <i>The Journal of Antibiotics</i> , January 1968, XXI(1):55-62.                                                                                                                                                |                                                            |                  |                                        |          |                               |  |
| AP                                                                                                                                                                                                                                            | Shay, A.J. et al., "Aspartocin. I. Production, Isolation, and Characteristics," <i>Antibiotics Annual</i> , 1959-1960, pp. 194-198.                                                                                                                                                     |                                                            |                  |                                        |          |                               |  |
| EXAMINER                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                         |                                                            |                  | DATE CONSIDERED                        |          |                               |  |
| * EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s). |                                                                                                                                                                                                                                                                                         |                                                            |                  |                                        |          |                               |  |



|                                                                                                |                      |                   |
|------------------------------------------------------------------------------------------------|----------------------|-------------------|
| <b>TRANSMITTAL<br/>FORM</b><br><br>(To be used for all correspondence<br>after initial filing) | Application Number   | 10/810,741        |
|                                                                                                | Filing Date          | March 26, 2004    |
|                                                                                                | First Named Inventor | Donald B. Borders |
|                                                                                                | Art Unit             | 1654              |
|                                                                                                | Examiner Name        |                   |
|                                                                                                | Attorney Docket No.  | 660081.425C1      |

| ENCLOSURES (check all that apply)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Response<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><input checked="" type="checkbox"/> Form PTO-1449<br><input type="checkbox"/> Cited References<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts under 37 C.F.R. 1.52 or 1.53<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Request for Corrected Filing Receipt<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address<br><input type="checkbox"/> Declaration<br><input type="checkbox"/> Statement under 37 CFR 3.73(b)<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC ( <i>Appeal Notice, Brief, Reply Brief</i> )<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Return Receipt Postcard<br><input type="checkbox"/> Other Enclosure(s) ( <i>please identify below</i> ):<br>_____<br>_____<br>_____<br>_____ |
| Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT |                                           |          |                                 |
|--------------------------------------------|-------------------------------------------|----------|---------------------------------|
| Firm Name                                  | Seed Intellectual Property Law Group PLLC |          | Customer Number<br><b>00500</b> |
| Signature                                  |                                           |          |                                 |
| Printed Name                               | Mae Joanne Rosok                          |          |                                 |
| Date                                       | December 15, 2004                         | Reg. No. | 48,903                          |

| CERTIFICATE OF TRANSMISSION/MAILING                                                                                                                                                                                                                                                                                                |                     |                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. |                     |                         |
| Signature                                                                                                                                                                                                                                                                                                                          |                     |                         |
| Typed or printed name                                                                                                                                                                                                                                                                                                              | Jennifer J. Fortuny | Date: December 15, 2004 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.